

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A system to sense the location of a distal portion of a member within a body, the system comprising:

an introducer portion ~~having~~ including:

a lumen adapted to introduce an instrument there-through, and
a distal end adapted to be placed within a body, the distal end having an opening lying in a plane perpendicular to a longitudinal axis of the lumen and a proximal end having an opening lying in a plane perpendicular to the longitudinal axis of the lumen;
and

a pressure sensor, in fluid communication via the lumen with the opening at the distal end, adapted to provide a pulsation which can be sensed by an operator when the distal end is placed within a pulsating portion of the body; ~~wherein the system further comprises~~ and

a core pin with a channel to provide said fluid communication, the core pin sized such that the core pin obstructs the opening at the distal end of the introducer so that the channel is the only flow path from the distal end of the introducer.

2. (Original) A system as set forth in claim 1, wherein the pulsation is visually displayed on a display.

3. (Previously presented) A system as set forth in claim 1, further comprising a chamber to visually display pulsation.

4. (Previously presented) A system as set forth in claim 3, wherein the chamber is a capillary tube.

5. (Original) A system as set forth in claim 1, wherein the distal end of the introducer portion is adapted to be positionable within a blood vessel.

6. (Previously presented) A system as set forth in claim 1, further comprising a chamber which is not vented to atmosphere to visually display pulsation.
7. (Previously presented) A system as set forth in claim 1, wherein the system comprises at least two chambers.
8. (Previously presented) A system as set forth in claim 1, further comprising a member which vibrates due to the pulsation such that the vibration of the member can be sensed by touch.
9. (Previously presented) A system as set forth in claim 1, further comprising a member which vibrates due to the pulsation such that the vibration can be visually observed.
10. (Original) A system as set forth in claim 1, wherein the pressure sensor comprises a pressure transducer.
11. (Cancelled)
12. (Currently amended) A system to sense the location of a distal portion of a member within a body, the system comprising:
 - an introducer portion ~~having~~ including:
 - a lumen adapted to introduce an instrument there-through, and
 - a distal end adapted to be placed within a body, the distal end having an opening lying in a plane perpendicular to a longitudinal axis of the lumen and a proximal end having an opening lying in a plane perpendicular to the longitudinal axis of the lumen[[:]] , and
 - a side hole near the opening at the distal end of the introducer portion;
 - and
 - a pressure sensor, in fluid communication via the side hole and the lumen with the ~~opening at the~~ distal end, adapted to provide a pulsation which can be sensed by an operator when the distal end is placed within a pulsating portion of the body [[:]]
 - ~~wherein the introducer portion further comprises a side hole near the distal end of the introducer portion.~~

13. (Previously presented) A system as set forth in claim 1, wherein the core pin further comprises an opening at an entrance to the channel.
14. (Original) A system as set forth in claim 13, wherein the opening lies in a plane perpendicular to the longitudinal axis of the lumen.
15. (Original) A system as set forth in claim 13, wherein the opening lies in a plane parallel to the longitudinal axis of the lumen.
16. (Previously presented) A system to sense the location of a distal portion of a member within a body, the system comprising:
an introducer portion having a lumen and a distal end adapted to be placed within a body;
a core pin inserted in the introducer portion such that a distal end of the core pin passes beyond the distal end of the introducer portion, the core pin having a portion of reduced diameter such that a channel is formed between an inner wall portion of the introducer portion and an outer portion of the core pin, the channel having an entrance distal from the distal end of the introducer portion; and
a pressure sensor, in fluid communication with the entrance via the channel, adapted to provide a pulsation which can be sensed by an operator when the entrance is placed within a pulsating portion of the body.
17. (Original) A system to sense the location of a distal portion of a member within a body, the system comprising:
an introducer portion having a lumen and a distal end adapted to be placed within a body;
a core pin inserted in the introducer portion such that a distal end of the core pin passes beyond the distal end of the introducer portion, the core pin having a portion of reduced diameter such that a channel is formed between an inner wall portion of the introducer portion and an outer portion of the core pin, the channel having an entrance

proximal from the distal end of the introducer portion via an opening in the introducer portion; and

a pressure sensor, in fluid communication with the entrance via the channel, adapted to provide a pulsation which can be sensed by an operator when the entrance is placed within a pulsating portion of the body.

18. (Currently amended) A system to sense the location of a distal portion of a member within a body, the system comprising:

an introducer portion having a lumen and a distal end adapted to be placed within a body;

a core pin inserted in the introducer portion such that a distal end of the core pin passes beyond the distal end of the introducer portion, the core pin having a channel, the channel having an entrance distal from the distal end of the introducer portion, the core pin sized such that the core pin obstructs the distal end of the introducer portion so that the channel is the only flow path from the distal end of the introducer portion; and

a pressure sensor, in fluid communication with the entrance via the channel, adapted to provide a pulsation which can be sensed by an operator when the entrance is placed within a pulsating portion of the body.